

RUCC0064.ST25.txt  
SEQUENCE LISTING

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Frenkel, Chaim  
Belanger, Faith

<120> PRODUCTION OF VANILLIN IN MICROBIAL CELLS

<130> RUCC-0064

<150> US 60/412,649

<151> 2002-10-23

<150> PCT/US2003/034011

<151> 2003-10-23

<160> 2

<170> PatentIn version 3.3

<210> 1

<211> 1219

<212> DNA

<213> Vanilla planifolia

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 35 40 45

Gln Ile Gln Ala Gly Gly Pro Asp Ser Tyr Leu Thr Ala Glu Asp Leu  
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Ala Ala Arg Leu Gly Asn Ser Asn Pro Leu Ala Pro Val Met Ile Glu  
 65 70 75 80

Arg Ile Leu Arg Leu Leu Thr Ser Tyr Ser Ile Leu Asn Phe Thr Asp  
 85 90 95

Thr Val Asp Gly Glu Gly Arg Thr Val Arg Ser Tyr Gly Ala Ala His  
 100 105 110

Val Cys Lys Tyr Leu Thr Pro Asn Gln Asp Gly Val Ser Met Ala Pro  
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Leu Val Leu Met Asn Thr Asp Lys Val Leu Met Glu Ser Trp Tyr His  
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Met Lys Asp Ala Val Thr Asn Gly Gly Ile Pro Phe Asn Leu Ala Tyr  
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Gly Met Thr Ala Phe Glu Tyr His Gly Lys Asp Leu Arg Phe Asn Lys  
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Val Phe Asn Glu Gly Met Lys Asn Asn Ser Ile Ile Ile Thr Lys Lys  
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Ile Leu Glu Arg Tyr Lys Arg Phe Glu Asp Val Asn Val Leu Ile Asp  
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Val Gly Gly Gly Ile Gly Gly Thr Ile Ser Met Ile Thr Ala Lys Tyr  
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Pro His Ile His Gly Ile Asn Phe Asp Leu Pro His Val Val Ser Glu  
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245 250 255

Ser Val Pro Ile Gly Asp Ala Ile Phe Ile Lys Trp Ile Leu His Asp  
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Trp Ser Asp Glu His Cys Leu Lys Leu Leu Arg Asn Cys Ala Lys Ser  
275 280 285

Leu Pro Asp Lys Gly Lys Val Ile Val Val Glu Cys Ile Leu Pro Asp  
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Ala Pro Leu Val Thr Pro Glu Ala Glu Gly Val Phe His Leu Asp Met  
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Ile Met Leu Ala His Asn Pro Gly Gly Lys Glu Arg Thr Lys Lys Glu  
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340 345 350

Phe Ser Tyr Ala Asn Val Trp Val Met Glu Phe Asn Lys  
355 360 365